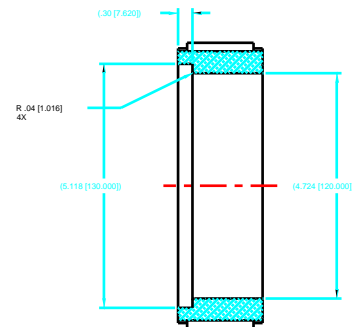



SECTION B-B



SECTION A-A

- NOTES:
1. THIS IS AN ULTRA-HIGH COMPONENT (I/IV).
 2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
A) CAMCOLUT STAR 49
B) TRIM SOL.
 3. THE COMPONENT NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING, AND DRY NITROGEN BLOWDOWN. THE CHAMBER VACUUM SIDE SURFACE ROUGHNESS SHALL BE BETTER THAN 63 MICRON R.M.S.
 4. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
 5. TOLERANCE SPECIFICATIONS TO CONFORM TO TOLERANCE BLOCK.
 6. DIMENSIONS [N] ARE MILLIMETERS AND ARE FOR REFERENCE ONLY.

ITEM		DISCUSSION NUMBER		NOMENCLATURE OR DESCRIPTION		MATERIAL / SPEC		CITY	
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (UNLESS NOTED)				PARTS LIST A18583  ARGONNE NATIONAL LABORATORY		ADVANCED PHOTON SOURCE			
SURFACE FINISHES RA - 0.8 63 - 1.0 125 - 1.6 250 - 3.2 500 - 6.3 1000 - 12.5 2000 - 25.0 4000 - 50.0 8000 - 100.0 16000 - 200.0 32000 - 400.0 64000 - 800.0 128000 - 1600.0 256000 - 3200.0 512000 - 6400.0 1024000 - 12800.0 2048000 - 25600.0 4096000 - 51200.0 8192000 - 102400.0 16384000 - 204800.0 32768000 - 409600.0 65536000 - 819200.0 131072000 - 1638400.0 262144000 - 3276800.0 524288000 - 6553600.0 1048576000 - 13107200.0 2097152000 - 26214400.0 4194304000 - 52428800.0 8388608000 - 104857600.0 16777216000 - 209715200.0 33554432000 - 419430400.0 67108864000 - 838860800.0 134217728000 - 1677721600.0 268435456000 - 3355443200.0 536870912000 - 6710886400.0 1073741824000 - 13421772800.0 2147483648000 - 26843545600.0 4294967296000 - 53687091200.0 8589934592000 - 107374182400.0 17179869184000 - 214748364800.0 34359738368000 - 429496729600.0 68719476736000 - 858993459200.0 137438953472000 - 1717986918400.0 274877906944000 - 3435973836800.0 549755813888000 - 6871947673600.0 1099511627776000 - 13743895347200.0 2199023255552000 - 27487790694400.0 4398046511104000 - 54975581388800.0 8796093022208000 - 109951162777600.0 17592186044416000 - 219902325555200.0 35184372088832000 - 439804651110400.0 70368744177664000 - 879609302220800.0 140737488355328000 - 1759218604441600.0 281474976710656000 - 3518437208883200.0 562949953421312000 - 7036874417766400.0 1125899906842624000 - 14073748835532800.0 2251799813685248000 - 28147497671065600.0 4503599627370496000 - 56294995342131200.0 9007199254740992000 - 112589990684262400.0 18014398509481984000 - 225179981368524800.0 36028797018963968000 - 450359962737049600.0 72057594037927936000 - 900719925474099200.0 144115188075855872000 - 1801439850948198400.0 288230376151711744000 - 3602879701896396800.0 576460752303423488000 - 7205759403792793600.0 1152921504606846976000 - 14411518807585587200.0 2305843009213693952000 - 28823037615171174400.0 4611686018427387904000 - 57646075230342348800.0 9223372036854775808000 - 115292150460684697600.0 18446744073709551616000 - 230584300921369395200.0 36893488147419103232000 - 461168601842738790400.0 73786976294838206464000 - 922337203685477580800.0 147573952589676412928000 - 1844674407370955161600.0 295147905179352825856000 - 3689348814741910323200.0 590295810358705651712000 - 7378697629483820646400.0 1180591620717411303424000 - 14757395258967641292800.0 2361183241434822606848000 - 29514790517935282585600.0 4722366482869645213696000 - 59029581035870565171200.0 9444732965739290427392000 - 118059162071741130342400.0 18889465931478580854784000 - 236118324143482260684800.0 37778931862957161709568000 - 472236648286964521369600.0 75557863725914323419136000 - 944473296573929042739200.0 151115727451828646838272000 - 1888946593147858085478400.0 302231454903657293676544000 - 3777893186295716170956800.0 604462909807314587353088000 - 7555786372591432341913600.0 1208925819614629174706176000 - 15111572745182864683827200.0 2417851639229258349412352000 - 30223145490365729367654400.0 4835703278458516698824704000 - 60446290980731458735308800.0 9671406556917033397649408000 - 120892581961462917470617600.0 19342813113834066795298816000 - 241785163922925834941235200.0 38685626227668133590597632000 - 483570327845851669882470400.0 77371252455336267181195264000 - 967140655691703339764940800.0 154742504910672534362390528000 - 1934281311383406679529881600.0 309485009821345068724781056000 - 3868562622766813359059763200.0 618970019642690137449562112000 - 7737125245533626718119526400.0 1237940039285380274899124224000 - 15474250491067253436239052800.0 2475880078570760549798248448000 - 309485009821345068724781									